Appl. No. 09/889,3351

Amdt. dated: October 28, 2003

Reply to Office action of July 29, 2003

This listing of Claims will replace all prior versions, and listings, of Claims in the application:

Listing of Claims:

Claims 1 -20 (Canceled)

- 21. (Previously amended) A filtering reactor comprising,
 - a) a tank open to the atmosphere;
 - b) one or more modules of suction driven filtering membranes in the tank for withdrawing a filtered permeate;
 - c) an inlet to add feed water to the tank; and,
 - d) a retentate outlet to discharge water containing retained solids from the tank from above the one or more modules; and,
 - e) aerators in the tank below the one or more modules; wherein
 - f) the one or more modules may be backwashed with a liquid comprising permeate; and,
 - g) the one or more modules have a surface area of at least 500 square meters for every square meter of horizontal cross-sectional area of the tank.
- 22. (Currently Amended) The reactor of Claim 21 wherein the one or more modules cover more than 90% of the horizontal cross-sectional area of the tank.
- 23. (Previously amended) The reactor of Claim 21 wherein
 - h) the one or more modules are divided into elements, each element having a pair of opposed headers; and,
 - i) the elements are separated from each other by impervious plates; and,
 - j) channels are provided for water to flow vertically through the elements.
- 24. (Previously added) The reactor of Claim 23 wherein the elements have hollow fiber membranes oriented generally horizontally.

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25. (Previously added) The reactor of Claim 21 wherein the inlet is located to add feed water to the tank from below the one or more modules.

26. (Canceled)

- 27. (Withdrawn) A process for filtering water comprising the steps of,
 - a) providing a filtering reactor as in any of Claims 21 through 25; and,
 - b) in repeated cycles,
 - (i) permeating filtered water while adding a sufficient volume of feed water to the tank to keep the membranes submerged; and
 - (ii) performing a deconcentration step further comprising at least one or both of (A) providing a flow of feed water into the tank from below the modules or (B) backwashing the one or more membrane modules with a liquid comprising permeate, wherein excess water containing retained solids flows out of the retentate outlet.
- 28. (Withdrawn) The process of Claim 27 wherein the step of permeating is performed at a flux of less than 60 Liters per square meter per hour based on the surface area of the outside of the filtering membranes.
- 29. (Withdrawn) The process of Claim 28 wherein the step of permeating is performed at a flux of less than 40 Liters per square meter per hour based on the surface area of the outside of the filtering membranes.
- 30. (Withdrawn) The process of Claim 27 wherein permeation is stopped during the deconcentration step and the one or more modules are aerated while permeation is stopped during the deconcentration step.

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- 31. (Withdrawn) The process of Claim 30 wherein the step of permeating is performed at a flux of less than 60 Liters per square meter per hour based on the surface area of the outside of the filtering membranes.
- 32. (Withdrawn) The process of Claim 31 wherein the step of permeating is performed at a flux of less than 40 Liters per square meter per hour based on the surface area of the outside of the filtering membranes.